REFERENCES

NATARAJAN, V., BALASUBRAMANIAN, P., ALAGAR RAJAN, S. & MANAKADAN, R. (1990): Further additions to the avifauna of Point Calimere. J. Bombay nat. Hist. Soc. 87(3): 457.

WALKER, I.G. (1983): Golden Eagle Killing mobbing Carrion Crows. *British Birds* 76: 312.

Weltry, J.C. (1982): The life of birds. 3rd ed. Saunders College Publishing, Philadelphia.

9. PIED HARRIER CIRCUS MELANOLEUCOS (PENNANT) IN SOUTH-EAST RAJASTHAN

The HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN (Ali and Ripley 1983) states that the pied harrier *Circus melanoleucos* is a winter visitor to the eastern parts of the Indian subcontinent from West Bengal, Bihar, Orissa, east through Bangladesh and Burma.

It is a rare visitor to Kerala, Tamil Nadu, Karnataka and eastern Madhya Pradesh and is considered to be a rare vagrant to Andhra Pradesh and Maharashtra. It is not recorded north of Bombay and west of Gorakhpur. It was sighted at Karera Bustard Sanctuary in north-west Madhya Pradesh (Rahmani 1988, JBNHS 85 (2): 419-420).

I saw a male pied harrier on 15 November 1990 at Lakhawa village near Kota in south-east Rajasthan (25°10′ N, 75°52′ E), sailing low over a wheat field. I watched it with 20x50 binoculars for about three minutes from close range (the field was just across the road). Its black culmen and head, contrasting black and white plumage made identification very easy. It was seen on two subsequent occasions, 9 December (near village Ranpur) and 30 December 1990 (near village Lakhawa). I presume it was the same bird as all the sightings were within a radius of 2-3 km.

February 8, 1991

RAKESH VYAS

10. BIOMETRICS OF THE COLLARED PRATINCOLE GLAREOLA PRATINCOLA MALDIVARUM J.R. FORSTER

During September/October 1990, as part of an ongoing study on bird migration by the BNHS, several individuals of the collared pratincole Glareola pratincola maldivarum were banded in Sullurpet marsh adjoining Pulicat Bird Sanctuary in south coastal Andhra Pradesh.

According to Ali and Ripley (1987) the collared pratincole is described as resident/locally migratory, spreading in winter over the Indian peninsula. Some authors (Prater et al. 1977, Vaurie 1965) treat this race as a distinct species, while Ripley (1982) describes this as a subspecies of the nominate race. Since there is little published information on this race occurring in India, an attempt has been made to briefly describe the biometrics of the species.

The grazing lands near Sullurpet attracted large flocks of the collared pratincole (total nos. 1000-1200) during the third week of September 1990. All the birds were seen arriving at their roosting grounds by dusk to settle down in the fields. A total of 61 individuals (58 adults, 3 juveniles) were banded and released 1-2 hours after capture.

The measurements are summarised in Tables 1,2.

Measurements given here were made on birds mistnetted during late evening hours at Sullurpet marsh between 22 September and 1 October 1990. The birds roosted in open grazing lands bordering the jheel. The following data were recorded for each bird.

- 1. Wing, bill, tarsus, tail (central and outer) length.
 - 2. Weight.
 - 3. Age, condition of moult.

Wing length: Adults were appreciably larger than juveniles, average 183.25 mm as compared to 173.6 mm. There seem to be similar changes in adult and juvenile birds as given by Prater et al. (1977). 31.14% of the birds caught had their primaries moulting.

Bill/tarsus length: There was no marked difference in bill/tarsus lengths (Table 1), but juveniles seemed to average slightly smaller in both cases. Ali and Ripley (1987) give the tarsus length range as 30-33 mm for this race, which is somewhat less than the present measurements (Table 1).

Table 1
WING, BILL AND TARSUS MEASUREMENTS FOR COLLARED PRATINCOLE

	Wing* (mm)			Bill (mm)			Tars	Tarsus (mm)		
	Range	Average	SD	Range	Average	SD	Range	Average	SD	
Adults (58)	160-194	183.25	6.32	12-15	13.55	0.67	30-36	32.33	1.34	
Juveniles (3)	171-176	173.6	2.51	12-13.5	12.83	0.75	31-33	31.83	1.03	

^{*}Adult wing measurements for 56 birds

Table 2
DEPTH OF TAIL FORK IN COLLARED PRATINCOLE

	Central tail feathers (mm)			Outer tail feathers (mm)			Difference (mm)		
	Range	Average	SD	Range	Average	SD	Range	Average	SD
Adults	51-59	54.58	2.07	60-86	77.01	6.48	8-28	18.34	5.89
Juveniles	51-55	52.60	2.07	66-67	66.6	0.57	12-15	14.0	1.73

^{*}Adult wing measurements for 56 birds.

Tail: In the collared pratincole, the tail dimensions are mainly taken into account with respect to the depth of the tail fork. Ali and Ripley (1987) use this criterion to segregate the two races (G. pratincola pratincola and G. pratincola maldivarum). In the current study the difference between central and outer tail feathers ranged from 8-28 mm for adults and 12-15 mm for juveniles (Table 2). Adults averaged 4.34 mm more than juveniles for the tail fork depth. The length of the outer tail feathers also showed considerable variation, ranging from 60-86 mm (av. 77.01).

Weight: There was considerable variation in the weights of individuals banded on each day of capture (Table 3). Birds banded on the first day of capture were heavier than those on other days. Adult weights for pratincoles ranged from 68-116 g, with an average of 95.81 g. Dietary in take may be an important factor in the variation in weights seen. Juveniles averaged 14.48 g less than adults (Table 4).

The movements of the collared pratincole have been previously described as locally migratory and nomadic. At Sullurpet marsh these birds were seen arriving in considerable numbers at their roost sites during the fourth week of September 1990 but few birds were seen during October 1990, indicating that they may be migrating elsewhere.

Adult birds seemed to show marked differences in wing length and weights when compared

to juveniles. However, it is not clear why adults have longer wings than juveniles. Bill and tarsus lengths varied little with respect to age. Maximum changes were noticed in the weights both in relation to age as well as day of capture. Clark (1979) states that several factors may influence body weights in birds and this may be the reason why weights show more variability than other measurements. The larger weights of adults may also be due to their greater efficiency in hawking insects.

The amount of food consumed by the adults on various days may be the single largest factor responsible for increase in body weights (Table

Table 3
VARIATION IN WEIGHTS OF COLLARED PRATINCOLES

Day	Average	Range	n	
	weight	(g)	(g)	
1	96.50	86-112	18	
2	98.88	78-116	27	
3	87.23	68-110	13	
4	86.6	78-92	3	

TABLE 4
WEIGHTS OF COLLARED PRATINCOLE

	Range (g)	Average (g)	SD
Adult	68-116	95.81	9.23
Juvenile	76-86	81.33	5.03

3). Overcast weather conditions on the later days of capture may have reduced the available food resources.

Hence food consumption on these days may have been less, resulting in lower weights. The crop contents on the first two days, when weather conditions were normal, were full.

March 7, 1991

PRAKASH RAO K.K. MOHAPATRA

REFERENCES

ALI, S. & RIPLEY, S.D. (1987): Handbook of the Birds of India and Pakistan. Compact 2nd Edition. Oxford University Press.

CLARK, G.A. (1979): Body weights in birds: a review. Condor 81: 193-202.

Prater, A.J., Marchant, J.H. & Vourinen, J. (1977): Guide to the Identification and ageing of Holarctic Waders. BTO Guide 17. Tring, Herts.

RIPLEY, S.D. (1982): A Synopsis of the Birds of India and Pakistan. 2nd Edition. Bombay Natural History Society, Bombay.

Vaurie, C. (1965): The birds of the Palearctic, Fauna Vol. 2 (non-passeriformes). H.F. & G. Witherby, London.

11. THREE ADDITIONS TO THE BIRDS OF KERALA, WITH A REPEAT SIGHT RECORD

Since September 1985, we have been regularly watching birds on the Malabar coast, and have been rewarded with sightings of hitherto unrecorded or rarely seen birds. Four such additions have been published by us and R. Venugopal (JBNHS 86: 458-9). Here we report three more additions to Kerala, and a repeat sight record.

Calidris tenuirostris (Horsfield): The eastern knot, hitherto unrecorded from Kerala, was sighted in the Katalundy estuary (20 km south of Kozhikhode) on 10 October 1987. Gradually their numbers rose from a brace on the first day, to 12 by the end of the month, but declined to two by 27 December.

Farther south in Sri Lanka, the eastern knot was first sighted by Ben King at Mannar on 4 March 1981, and subsequently several were sighted in 1983 at the same place (King, JBNHS 86: 10).

Limosa limosa (Linn.): The blacktailed godwit is said to have become common and plentiful in recent years in the coastal regions and Dry Zone areas of Sri Lanka (Hoffmann, JBNHS 86: 10). The first record for Kerala is from the Katalundy

estuary on 13 September 1987, when three individuals were met with. On 6 March 1988 we came across about 50 individuals resting among teals, with a second group feeding in the shallow water nearby. This was in the estuary of the Bharathapuzha (Malapuram district).

During a subsequent visit to the same area on 13 March 1988, over 50 birds were found feeding in two or three loose flocks.

Tadorna ferruginea (Pallas): A solitary brahminy duck, hitherto unrecorded from Kerala, was first seen in Bharathapuzha estuary on 6 March 1988. The bird was present there on 13 March. E. Ayyapappan (pers. comm.) recalls having seen the brahminy duck in this estuary some 3-4 years back.

In addition to the above three new records for Kerala, we also found the crab plover *Dromas ardeola* Paykull in the Katalundy estuary on 21 October 1987. It remained there till 27 March 1988. The bird was first recorded from Kerala by K.K. Neelakantan and others (*JBNHS 77:* 503).

February 4, 1991

P.K. UTHAMAN L. NAMASIVAYAN

12. SOME WADER RECORDS FROM COASTAL ANDHRA PRADESH

Pulicat Bird Sanctuary in south coastal Andhra Pradesh (13°25' to 13°55' N, 80°03' to 80°19' E) is the second largest brackishwater body in India, with extensive coastal salt lagoons and

mudflats. The sanctuary has an area of about 450 sq. km of which a major part (84%) lies in Andhra Pradesh and the rest in Tamil Nadu. The sanctuary is a major wetland for migratory shorebirds on the